DOI: 10.5152/TurkThoracJ.2019.04

[Abstract:0696] MS-006 [Accepted: Oral Presentation] [Pulmonary and Pleural Malignancies]

Primary Lung Spindle Cell Carcinoma

Nimet Aksel[1], Mine Gayaf[1], Gülsüm Arı[1], Filiz Güldaval[1], Ahmet Ucvet[2], Emel Cireli[1], Nur Yücel[3], Canan Fırat[3], Ali Kadri Çırak[1], Dursun Alizoroğlu[1], Ahmet Emin Erbaycu[1]

[1]Department of Pulmonology, University of Health Sciences Dr. Suat Seren Chest Diseases and Thoracic Surgery Training and Research Hospital, İzmir, Turkey
[2]Department of Thoracic Surgery, University of Health Sciences Dr. Suat Seren Chest Diseases and Thoracic Surgery Training and Research Hospital, İzmir, Turkey
[3]Department of Pathology, University of Health Sciences Dr. Suat Seren Chest Diseases and Thoracic Surgery Training and Research Hospital, İzmir, Turkey

Objectives: The 2015 World Health Organization (WHO) classification of lung tumors has defined that "the spindle cell carcinomas (SpCC) consist of an almost pure population of epithelial spindle cells, with no differentiated carcinomatous elements" and located SpCC under the epithelial lung tumors among five subgroups of sarcomatoid carcinomas. In this study we aimed to explore the general demographics, clinico-pathologic features, management, outcome and prognostic factors of this rare type of lung cancer in the light of the new classification.

Methods: We retrospectively analyzed the database of 12000 primary lung cancer cases newly diagnosed between January 2008 and June 2018.

Results: In the data of 10 years, we found 43 cases with spindle cell tumors. Two pathologists reviewed the cases independently from each other. Thirty-three cases were excluded, as 16 cases were sarcoma, but not carcinoma; eight cases were diagnosed only cytological; diagnosis of nine operated cases had been changed after analysis of operation material. Ten cases of primary lung SpCC were included. Median age was 63.5 (41-85) years, eight (80%) cases were males, eight (80%) cases had smoking history, four (40%) cases had comorbidity, eight (80%) cases were symptomatic (mostly cough). The tumor was 70% (n=7) peripherally localized (mostly (40%, n=4) at the left upper lobe). Mean diameter of the tumor was 4.78 cm (2.5-8.6). Only six cases had PET/CT before treatment, with a mean SUV of the primary tumor 13.4 (7.8-20.7). The certain SpCC diagnosis was made with analysis of operation (50%), trucut (30%) and bronchoscopy materials (20%). Immunohistochemically, Vimentin (100%), Pancytokeratin (60%), P63 (30%), TTF-1 (20%), EMA (20%) were positive. The stage of the disease according to TNM 8th classification was 2A (10%), 2B (40%), 3A (10%), 4A (30%) and 4B (10%). Five cases were operated, but three of them relapsed. The most common metastatic site, in the four cases with stage 4 disease, was lung. Because of poor performance, chemotherapy could be administered in only one metastatic case with regressive response to six cycles cisplatin-docetaxel. Chemotherapy given case was alive for 11 months, where the other three metastatic cases died within 2 months. In total three of cases were alive, where seven died. Survival time was 31 months (mean) and 13 (1-159) months (median).

Conclusion: The spindle cell carcinomas (SpCC) are usually seen in smoker males with a symptomatic clinic. The tumor is localized frequently on peripheral lung and is accurately diagnosed by surgical procedure. These rare tumors, with poor prognosis remain as subject of interest.

Keywords: Spindle cell carcinoma, sarcomatoid carcinoma, lung cancer